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10/622,735	07/21/2003	Yasuaki Tsuchiya	8017-1096	4719
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YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			EXAMINER MARCHESCHI, MICHAEL A	
			ART UNIT 1755	PAPER NUMBER

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/622,735

Applicant(s)

TSUCHIYA ET AL.

Examiner

Michael A Marcheschi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/21/03, 7/1/04
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 3-6 are rejected under 35 U.S.C. 102(a or e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wang et al. (337).

Wang et al. teaches in the abstract, sections [0020]-[0027] and [0033]-[0036], a polishing composition comprising silica, an oxidizing agent, an amino acid and a triazole compound. The amounts for the amino acid and a triazole compound are defined. It is implied that the composition can have any pH value.

The claimed invention is anticipated by the reference because the reference teaches a composition which comprises all of the claimed components and when the ratio of the claimed components is calculated from the reference, the reference ratio encompasses the claimed ratio,

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thus no distinction is seen to exist. With respect to the use of colloidal silica, the reference states that a colloidal dispersion is formed and this implies that the silica is colloidal absent evidence to the contrary. In the alternative, no patentable distinction is seen to exist in the absence of any evidence showing the contrary.

Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. (337).

The reference teaches that the composition comprises an alpha amino acid and since glycine is an alpha amino acid, this limitation is obvious because **"A generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971)".** Assuming arguendo about the colloidal silica limitation, the use of any conventional polishing abrasive (i.e. colloidal silica) would have been obvious to the skilled artisan because the substitution of one abrasive for another that is used for the same purpose (polishing) is well within the level of ordinary skill in the art.

Claims 1-2 and 4-6 are rejected under 35 U.S.C. 102(a or e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tsai et al. (167).

Tsai et al. teaches in column 5, line 15-column 6, line 10, a polishing composition comprising silica, an oxidizing agent, an amino acid (glycine) and a triazole compound. The

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amounts for the amino acid and a triazole compound are defined (both less than 2 vol. percent).

The composition has the claimed pH value.

The claimed invention is anticipated by the reference because the reference teaches a composition which comprises all of the claimed components and when the amounts of the glycine and triazole components are converted to weight percent and calculated in terms of a ratio, the reference ratio encompasses the claimed ratio, thus no distinction is seen to exist. With respect to the use of colloidal silica, the reference states that a colloidal suspension is formed and this implies that the silica is colloidal absent evidence to the contrary. In the alternative, no patentable distinction is seen to exist in the absence of any evidence showing the contrary because the amounts disclosed by the reference, when converted to wt. percent and calculated in terms of the claimed ratio, broadly encompass the claimed range and thus make this ratio obvious.

Claims 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsai et al. (167) in view of Wang et al. (337).

The primary reference teaches that the composition comprises a corrosion inhibitor (i.e. film forming agent), such as benzotriazole, and it is the examiners position that one skilled in the art would have found it obvious to use the claimed triazole in place of the reference triazole because Wang et al. teaches that both of these triazoles are known corrosion inhibitors (i.e. film forming agents) and the substitution of one triazole material for another that is used for the same purpose (polishing) is well within the level of ordinary skill in the art. In addition, the primary reference teaches **examples of** triazoles that can be used and it is the examiners position that this

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teaching does not limit the reference to only the ones disclosed, thus making other known triazoles obvious. Assuming *arguendo* about the colloidal silica limitation, the use of any conventional polishing abrasive (i.e. colloidal silica) would have been obvious to the skilled artisan because the substitution of one abrasive for another that is used for the same purpose (polishing) is well within the level of ordinary skill in the art.

Claims 1-2 and 4-6 are rejected under 35 U.S.C. 102(a or e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sakai et al. (186).

Sakai et al. (186) teaches in column 3, line 40-column 5, line 60, the examples and the claims, a polishing composition comprising colloidal silica, an oxidizing agent, an amino acid (glycine) and a triazole compound. The amounts for the amino acid and a triazole compound are defined. The composition has the claimed pH value.

The claimed invention is anticipated by the reference because the reference teaches a composition which comprises all of the claimed components and when the amounts of the glycine and triazole components are converted to weight percent and calculated in terms of a ratio, the reference ratio encompasses the claimed ratio, thus no distinction is seen to exist. In the alternative, no patentable distinction is seen to exist in the absence of any evidence showing the contrary because the amounts disclosed by the reference, when converted to wt. percent and calculated in terms of the claimed ratio, broadly encompass the claimed range and thus make this ratio obvious.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sakai et al. (186) in view of Wang et al. (337).

The primary reference teaches that the composition comprises a corrosion inhibitor (i.e. film forming agent), such as benzotriazole, and it is the examiners position that one skilled in the art would have found it obvious to use the claimed triazole in place of the reference triazole because Wang et al. teaches that both of these triazoles are known corrosion inhibitors (i.e. film forming agents) and the substitution of one triazole material for another that is used for the same purpose (polishing) is well within the level of ordinary skill in the art. In addition, the primary reference teaches **examples of** triazoles that can be used and it is the examiners position that this teaching does not limit the reference to only the ones disclosed, thus making other known triazoles obvious. Assuming arguendo about the colloidal silica limitation, the use of any conventional polishing abrasive (i.e. colloidal silica) would have been obvious to the skilled artisan because the substitution of one abrasive for another that is used for the same purpose (polishing) is well within the level of ordinary skill in the art.

Claims 1-2 and 4-6 are rejected under 35 U.S.C. 102(a or e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Asano et al. (929).

Asano et al. teaches in the abstract, column 3, line 58-column 6, line 10, the examples and the claims, a polishing composition comprising colloidal silica, an oxidizing agent, an amino acid (glycine) and a triazole compound. The amounts for the amino acid and a triazole compound are defined. The composition has the claimed pH value.

The claimed invention is anticipated by the reference because the reference teaches a composition which comprises all of the claimed components and when the amounts of the glycine and triazole components are converted to weight percent and calculated in terms of a ratio, the reference ratio encompasses the claimed ratio, thus no distinction is seen to exist. In the alternative, no patentable distinction is seen to exist in the absence of any evidence showing the contrary because the amounts disclosed by the reference, when converted to wt. percent and calculated in terms of the claimed ratio, broadly encompass the claimed range and thus make this ratio obvious.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Asano et al. (929) in view of Wang et al. (337).

The primary reference teaches that the composition comprises a corrosion inhibitor (i.e. film forming agent), such as benzotriazole, and it is the examiners position that one skilled in the art would have found it obvious to use the claimed triazole in place of the reference triazole because Wang et al. teaches that both of these triazoles are known corrosion inhibitors (i.e. film forming agents) and the substitution of one triazole material for another that is used for the same purpose (polishing) is well within the level of ordinary skill in the art. In addition, the primary reference teaches **examples of** triazoles that can be used and it is the examiners position that this teaching does not limit the reference to only the ones disclosed, thus making other known triazoles obvious. Assuming arguendo about the colloidal silica limitation, the use of any conventional polishing abrasive (i.e. colloidal silica) would have been obvious to the skilled



artisan because the substitution of one abrasive for another that is used for the same purpose (polishing) is well within the level of ordinary skill in the art.

Claims 1-2 and 4-5 are rejected under 35 U.S.C. 102(a or e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sinha et al. (935).

Sinha et al. teaches in column 5, line 30-column 6, line 39, a polishing composition comprising silica, an oxidizing agent, an amino acid (glycine) and a triazole compound. The amounts for the amino acid and a triazole compound are defined. The composition has the claimed pH value.

The claimed invention is anticipated by the reference because the reference teaches a composition which comprises all of the claimed components and when the amounts of the glycine and triazole components are calculated in terms of a ratio, the reference ratio encompasses the claimed ratio, thus no distinction is seen to exist. In the alternative, no patentable distinction is seen to exist in the absence of any evidence showing the contrary because the amounts disclosed by the reference, when converted to wt. percent and calculated in terms of the claimed ratio, broadly encompass the claimed range and thus make this ratio obvious.

Claims 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sinha et al. (935) in view of Wang et al. (337).

The primary reference teaches that the composition comprises a corrosion inhibitor (i.e. film forming agent), such as benzotriazole, and it is the examiners position that one skilled in the

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art would have found it obvious to use the claimed triazole in place of the reference triazole because Wang et al. teaches that both of these triazoles are known corrosion inhibitors (i.e. film forming agents) and the substitution of one triazole material for another that is used for the same purpose (polishing) is well within the level of ordinary skill in the art. In addition, the primary reference teaches **examples of** triazoles that can be used and it is the examiners position that this teaching does not limit the reference to only the ones disclosed, thus making other known triazoles obvious. With respect to the colloidal silica limitation, the use of any conventional polishing abrasive (i.e. colloidal silica) would have been obvious to the skilled artisan because the substitution of one abrasive for another that is used for the same purpose (polishing) is well within the level of ordinary skill in the art.

Claims 1-2 and 4-5 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Taiwanese Patent No. 455626.

The Taiwanese patent teaches in the entire document, a polishing composition comprising silica, an oxidizing agent, an amino acid (glycine) and a triazole compound. The amounts for the amino acid and a triazole compound are defined. The composition has the claimed pH value.

The claimed invention is anticipated by the reference because the reference teaches a composition which comprises all of the claimed components and when the amounts of the glycine and triazole components are in terms of a ratio, the reference ratio encompasses the claimed ratio, thus no distinction is seen to exist. In the alternative, no patentable distinction is seen to exist in the absence of any evidence showing the contrary because the amounts disclosed

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by the reference, when converted to wt. percent and calculated in terms of the claimed ratio, broadly encompass the claimed range and thus make this ratio obvious.

Claims 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taiwanese Patent No. 455626 in view of Wang et al. (337).

The primary reference teaches that the composition comprises a corrosion inhibitor (i.e. film forming agent), such as benzotriazole, and it is the examiners position that one skilled in the art would have found it obvious to use the claimed triazole in place of the reference triazole because Wang et al. teaches that both of these triazoles are known corrosion inhibitors (i.e. film forming agents) and the substitution of one triazole material for another that is used for the same purpose (polishing) is well within the level of ordinary skill in the art. In addition, the primary reference teaches **examples of** triazoles that can be used and it is the examiners position that this teaching does not limit the reference to only the ones disclosed, thus making other known triazoles obvious. With respect to the colloidal silica limitation, the use of any conventional polishing abrasive (i.e. colloidal silica) would have been obvious to the skilled artisan because the substitution of one abrasive for another that is used for the same purpose (polishing) is well within the level of ordinary skill in the art.

**The examiner has adopted the rejection of the foreign patent office based on Taiwanese Patent No. 455626, which was submitted on 7/1/04.**

Claims 1 and 4-6 are rejected under 35 U.S.C. 102(a or e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kaufman et al. (239).

Kaufman et al. (239) teach in column 5, line 37-column 8, line 48, a polishing composition comprising silica, an oxidizing agent, an amino acid and a triazole compound. The amounts for the amino acid and a triazole compound are defined. The composition has the claimed pH.

The claimed invention is anticipated by the reference because the reference teaches a composition which comprises all of the claimed components and when the ratio of the claimed components is calculated from the reference, the reference ratio encompasses the claimed ratio, thus no distinction is seen to exist. With respect to the use of colloidal silica, the reference states that a colloidal dispersion is formed and this implies that the silica is colloidal absent evidence to the contrary. In the alternative, no patentable distinction is seen to exist in the absence of any evidence showing the contrary.

Claims 1 and 4-6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kaufman et al. (306).

Kaufman et al. (306) teach in column 4, line 52-column 6, line 55 and column 9, line 26-column 10, line 50, a polishing composition comprising silica, an oxidizing agent, an amino acid and a triazole compound. The amounts for the amino acid and a triazole compound are defined. The composition has the claimed pH.

The claimed invention is anticipated by the reference because the reference teaches a composition which comprises all of the claimed components and when the ratio of the claimed components is calculated from the reference, the reference ratio encompasses the claimed ratio, thus no distinction is seen to exist. With respect to the use of colloidal silica, the reference states

that a colloidal dispersion is formed and this implies that the silica is colloidal absent evidence to the contrary. In the alternative, no patentable distinction is seen to exist in the absence of any evidence showing the contrary.

Claims 2-3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over either (1) Kaufman et al. (239) or (2) Kaufman et al. (306) **both** in view of Wang et al. (337).

The primary references teach that the composition comprises an amino acid and since glycine is an amino acid, this limitation is obvious because **"A generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971)".** Assuming arguendo about the colloidal silica limitation, the use of any conventional polishing abrasive (i.e. colloidal silica) would have been obvious to the skilled artisan because the substitution of one abrasive for another that is used for the same purpose (polishing) is well within the level of ordinary skill in the art. The primary references teach that the composition comprises a corrosion inhibitor (i.e. film forming agent), such as benzotriazole, and it is the examiners position that one skilled in the art would have found it obvious to use the claimed triazole in place of the reference triazole because Wang et al. teaches that both of these triazoles are known corrosion inhibitors (i.e. film forming agents) and the substitution of one triazole material for another that is used for the same purpose (polishing) is well within the level of ordinary skill in the art. In addition, the primary references teach **examples of** triazoles that can be used and it is the examiners position that this teaching

does not limit the references to only the ones disclosed, thus making other known triazoles obvious.

**The examiner acknowledges the results defined in the tables of the instant specification, but at most these tables show critical evidence for the specific amino acid and specific triazole defined in the tables as well as for the specific contents of triazole define therein. In other words, the tables do not show criticality for any and all amino acids and triazoles and any and all amounts of triazoles. The tables are only limited to specific components and amounts and thus the tables only show criticality for what is disclosed therein and not for the broad composition as defined in claim 1.**

In view of the teachings as set forth above, it is the examiners position that the references reasonably teach or suggest the limitations of the rejected claims.

**"A reference is good not only for what it teaches but also for what one of ordinary skill might reasonably infer from the teachings. *In re Opprecht* 12 USPQ 2d 1235, 1236 (CAFC 1989); *In re Bode* USPQ 12; *In re Lamberti* 192 USPQ 278; *In re Bozek* 163 USPQ 545, 549 (CCPA 1969); *In re Van Mater* 144 USPQ 421; *In re Jacoby* 135 USPQ 317; *In re LeGrice* 133 USPQ 365; *In re Preda* 159 USPQ 342 (CCPA 1968)". In addition, "A reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments" See *In re Van Marter*, 144 USPQ 421.**

**"A generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co.***

*v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971)".

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness, see *In re Malagari*, 182 U.S.P.Q. 549; *In re Wertheim* 191 USPQ 90 (CCPA 1976)".

Evidence of unexpected results must be clear and convincing. *In re Lohr* 137 USPQ 548. Evidence of unexpected results must be commensurate in scope with the subject matter claimed. *In re Linder* 173 USPQ 356.

The additional references cited on the 1449 have been reviewed by the examiner and are considered to be art of interest since they are cumulative to or less than the art relied upon in the above rejections.

Any foreign language documents submitted by applicant has been considered to the extent of the short explanation of significance, English abstract or English equivalent, if appropriate.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

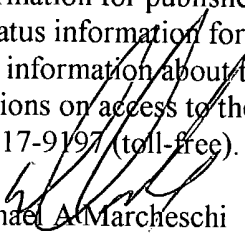
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark L Bell can be reached on (571) 272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

8/04

MM

  
Michael A. Marcheschi  
Primary Examiner  
Art Unit 1755